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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/20/2001

Sunao Murata

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08/25/2006

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EXAMINER

POKRZYWA, JOSEPH R

ART UNIT

PAPER NUMBER

2625

DATE MAILED: 08/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/889,567

Applicant(s)

MURATA, SUNAO

Examiner

Joseph R. Pokrzywa

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. Applicant's amendment was received on 6/8/06, and has been entered and made of record. Currently, **claims 1-28** are pending.

Response to Arguments

2. Applicant's arguments, see pages 11-15, filed 6/8/06, with respect to the rejection(s) of claim(s) 1, 8, 14, 21, and 28 under 35 U.S.C. 102(b) as being anticipated by Teradaira *et al.* (U.S. Patent Number 5,800,081) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Tamagaki (U.S. Patent Number 5,716,148).

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. **Claims 1-6, 8-11, 14-19, 21-26, and 28** are rejected under 35 U.S.C. 102(b) as being anticipated by Tamagaki (U.S. Patent Number 5,716,148).

Regarding *claim 1*, Tamagaki discloses a medium having a status information printing program recorded thereon to be run on a host computer (host device 70) in order for a printer to

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print status information (see Figs. 5 and 6, column 9, line 11-column 10, line 12), the host computer and the printer being connected for two-way communication (see Figs. 2, and 4-6), the printing program comprising an output initiation instruction monitor function configured to monitor the output initiation instruction for the status information that the printer outputs through the two-way communication (column 10, lines 1-45), the status information being output without solicitation from the host computer (column 10, lines 25-58), a status information acquisition function on the host side configured to acquire status information data from the printer through the two-way communication (column 10, line 38-column 11, line 6), a printing data generation function configured to generate printing data to print printer status information indicated by the status information data acquired by the status information acquisition function on the host side when the output initiation instruction is recognized by the output initiation instruction monitor function (column 10, line 46-column 11, line 6), and a printing data output function configured to output to the printer through the two-way communication the printing data generated by the printing data generation function (column 10, line 46-column 11, line 6).

Regarding *claim 2*, Tamagaki discloses the medium discussed above in claim 1, and further teaches that the printing data generated by the printing data generation function is dot image data (see Fig. 7, column 9, lines 11-67).

Regarding *claim 3*, Tamagaki discloses the medium discussed above in claim 1, and further teaches that part of the status information data is in the printer whether the output initiation instruction exists or not (column 10, lines 1-45), and initiation instruction monitor function is configured to monitor whether the output initiation instruction is contained in the

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status information data acquired by the status information acquisition function on the host side (column 10, line 1-column 11, line 6).

Regarding **claim 4**, Tamagaki discloses the medium discussed above in claim 1, and further teaches that the output initiation instruction is a trigger transmitted from the printer through the two-way communication (column 10, line 1-column 11, line 6), and the output initiation instruction monitor function is configured to judge whether the trigger is received (column 10, line 1-column 11, line 6).

Regarding **claim 5**, Tamagaki discloses the medium discussed above in claim 1, and further teaches that the status information acquisition function is configured to analyze the status of the printer based on the acquired status information data (column 10, line 1-column 11, line 6), and the status information acquisition function is configured to warn a user on the host computer if the printer can perform no printing (column 10, line 1-column 11, line 6).

Regarding **claim 6**, Tamagaki discloses the medium discussed above in claim 1, and further teaches that the status information acquisition function is configured to acquire the communication mode as the status information data when two-way communication is held with the printer (column 10, line 1-column 11, line 6).

Regarding **claim 8**, Tamagaki discloses a printer (copying machine 10) for holding two-way communication with a host computer and printing status information about the printer (see Figs. 2, and 4-6), the printer comprising an output initiation instruction unit configured to instruct the output initiation of the status information (column 10, line 38-column 11, line 6), a status information acquisition unit on the printer's side configured to acquire status information data on the printer (column 10, line 38-column 11, line 6), a status information output unit

configured to output through the two-way communication, without solicitation from the host computer (column 10, line 38-column 11, line 6), the status information data acquired by the status information acquisition unit on the printer's side (column 10, line 38-column 11, line 6), and causing the host computer (host device 70) to generate printing data for the printer to print the status information (column 11, lines 2-6), and a printing unit configured to receive the printing data from the host computer through the two-way communication and performing predetermined printing based on the received data (column 10, line 46-column 11, line 6).

Regarding *claim 9*, Tamagaki discloses the printer discussed above in claim 8, and further teaches that the printing data received by the printing unit is dot image data (see Fig. 7, column 9, lines 11-67).

Regarding *claim 10*, Tamagaki discloses the printer discussed above in claim 8, and further teaches that the status information acquisition unit includes a status information data storage part for storing status information data (column 10, lines 1-45), and is configured to write the output initiation instruction as part of the status information data in accordance with the output initiation instruction of the output initiation instruction unit (column 10, line 1-column 11, line 6), and the status information output unit is configured to output through the two-way communication the status information stored in the status information data storage part (column 10, line 1-column 11, line 6).

Regarding *claim 11*, Tamagaki discloses the printer discussed above in claim 8, and further teaches that the output initiation instruction unit is configured to output a trigger as the output initiation instruction through the two-way communication (column 10, line 1-column 11, line 6), and the status information output unit is configured to output the status information data

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acquired by the status information acquisition unit after the trigger is outputted (column 10, line 1-column 11, line 6).

Regarding *claim 14*, Tamagaki discloses a printing controller for causing a printer connected for two-way communication (see Figs. 2, and 4-6) to print status information on the printer (column 10, line 46-column 11, line 6), the printing controller comprising an output initiation instruction monitor unit configured to monitor the output initiation instruction for the status information that the printer outputs through the two-way communication (column 10, lines 1-45), the status information being output without solicitation from the host computer (column 10, lines 25-58), a status information acquisition unit on the host side configured to acquire status information data from the printer through the two-way communication (column 10, line 38-column 11, line 6), a printing data generation unit configured to generate printing data to print printer status information indicated by the status information data acquired by the status information acquisition unit on the host side when the output initiation instruction monitor unit recognizes the output initiation instruction (column 10, line 46-column 11, line 6), and a printing data output unit configured to output to the printer through the two-way communication the printing data generated by the printing data generation unit (column 10, line 46-column 11, line 6).

Regarding *claim 15*, Tamagaki discloses the controller discussed above in claim 14, and further teaches that the printing data generated by the printing data generation unit is dot image data (see Fig. 7, column 9, lines 11-67).

Regarding *claim 16*, Tamagaki discloses the controller discussed above in claim 14, and further teaches that part of the status information data is in the printer whether the output

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initiation instruction exists or not (column 10, lines 1-45), and the output initiation instruction monitor unit is configured to monitor whether the output initiation instruction is contained in the status information data acquired by the status information acquisition unit on the host side (column 10, line 1-column 11, line 6).

Regarding **claim 17**, Tamagaki discloses the controller discussed above in claim 14, and further teaches that the output initiation instruction is a trigger transmitted from the printer through the two-way communication (column 10, line 1-column 11, line 6), and the output initiation instruction monitor unit is configured to judge whether the trigger is received (column 10, line 1-column 11, line 6).

Regarding **claim 18**, Tamagaki discloses the controller discussed above in claim 14, and further teaches that the status information acquisition unit is configured to analyze the status of the printer based on the acquired status information data (column 10, line 1-column 11, line 6), and the status information acquisition unit is configured to warn a user on the host computer if the printer can perform no printing (column 10, line 1-column 11, line 6).

Regarding **claim 19**, Tamagaki discloses the controller discussed above in claim 18, and further teaches that the status information acquisition unit is configured to acquire the communication mode as the status information data when two-way communication is held with the printer (column 10, line 1-column 11, line 6).

Regarding **claim 21**, Tamagaki discloses a status information printing method for causing a printer (copying machine 10) to print status information under control of a host computer (host device 70), the printer and the host computer being connected for two-way communication (see Figs. 2, and 4-6), the method comprising an output initiation instruction monitor step for

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monitoring the output initiation instruction for the status information that the printer outputs through the two-way communication (column 10, lines 1-45), the status information being output without solicitation from the host computer (column 10, lines 25-58), a status information acquisition step on the host side for acquiring status information data from the printer through the two-way communication (column 10, line 38-column 11, line 6), a printing data generation step for generating printing data to print printer status information indicated by the status information data acquired in the status information acquisition step on the host side when the output initiation instruction is recognized in the output initiation instruction monitor step (column 10, line 46-column 11, line 6), and a printing data output step for outputting to the printer through the two-way communication the printing data generated in the printing data generation step (column 10, line 46-column 11, line 6).

Regarding *claim 22*, Tamagaki discloses the method discussed above in claim 21, and further teaches that the printing data generated in the printing data generation step is dot image data (see Fig. 7, column 9, lines 11-67).

Regarding *claim 23*, Tamagaki discloses the method discussed above in claim 21, and further teaches that part of the status information data is in the printer whether the output initiation instruction exists or not (column 10, lines 1-45), and the output initiation instruction monitor step monitors whether the output initiation instruction is contained in the status information data acquired in the status information acquisition step on the host side (column 10, line 1-column 11, line 6).

Regarding *claim 24*, Tamagaki discloses the method discussed above in claim 21, and further teaches that the output initiation instruction is a trigger transmitted from the printer

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through the two-way communication (column 10, line 1-column 11, line 6), and the output initiation instruction monitor step is configured to judge whether the trigger is received (column 10, line 1-column 11, line 6).

Regarding **claim 25**, Tamagaki discloses the method discussed above in claim 21, and further teaches that the status information acquisition step analyzes the status of the printer based on the acquired status information data (column 10, line 1-column 11, line 6), and the status information acquisition step warns a user on the host computer if the printer can perform no printing (column 10, line 1-column 11, line 6).

Regarding **claim 26**, Tamagaki discloses the method discussed above in claim 21, and further teaches that the status information acquisition step acquires the communication mode as the status information data when two-way communication is held with the printer (column 10, line 1-column 11, line 6).

Regarding **claim 28**, Tamagaki discloses a status information printing system consisting of a host computer (host device 70) and a printer (copying machine 10) that are connected for two-way communication via a predetermined data transfer line (see Figs. 2, and 4-6), the system characterized by the printer configured to output status information data through the two-way communication to the host computer, without solicitation from the host computer, in accordance with a status information output initiation instruction (column 10, line 38-column 11, line 6), and perform predetermined printing based on printing data outputted by the host computer (column 10, line 38-column 11, line 6), and the host computer configured to acquire the status information data outputted from the printer through the two-way communication (column 10, line 46-column 11, line 6), and generate predetermined printing data to print status information

indicated by the status information data, and output the printing data to the printer (column 10, line 46-column 11, line 6).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 7, 20, and 27** are rejected under 35 U.S.C. 103(a) as being unpatentable over Tamagaki (U.S. Patent Number 5,716,148) in view of Akiyama *et al.* (U.S. Patent Number 6,771,378, cited in the Office action dated 3/8/06).

Regarding **claims 7, 20, and 27**, Tamagaki discloses the medium, controller, and method discussed above in claims 1, 14, and 21, respectively, but fails to expressly disclose if the printing data generation function is configured to generate from a default file the form of the printing images to be printed by the printer, generate the character string image corresponding to the status based on the status information data, and generate the printing image by superimposing them together.

Akiyama discloses a medium having a status information printing program recorded thereon to be run on a host computer in order for a printer to print status information (see Fig. 1, column 8, line 54-column 9, line 51, and column 55, lines 57-61), the host computer and the printer being connected for two-way communication (see Fig. 1, column 8, lines 56-64), the printing program comprising an output initiation instruction monitor function configured to

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monitor the output initiation instruction for the status information that the printer outputs through the two-way communication (see Figs. 43A-43C, step, S1602, and column 55, line 41-column 56, line 43), a status information acquisition function on the host side configured to acquire status information data from the printer through the two-way communication (step S1603, column 56, lines 5-43), a printing data generation function configured to generate printing data to be printed by the printer based on the status information data acquired by the status information acquisition function on the host side when the output initiation instruction is recognized by the output initiation instruction monitor function (steps S1604-S1611, column 56, line 11-column 57, line 51), and a printing data output function configured to output to the printer through the two-way communication the printing data generated by the printing data generation function (steps S1613-S1614, column 57, line 49-column 58, line 8). Further, Akiyama discloses the medium discussed above in claim 1, and further teaches that the printing data generation function is configured to generate from a default file the form of the printing images to be printed by the printer (column 9, lines 25-51), generate the character string image corresponding to the status based on the status information data (column 9, lines 25-51, column 32, lines 38-63, and column 44, line 55-column 45, line 7), and generate the printing image by superimposing them together (column 9, lines 25-51, column 32, lines 38-63, and column 44, line 55-column 45, line 7).

Tamagaki & Akiyama are combinable because they are from the same field of endeavor, being systems that transmit status information of a printer to a host computer via a two-way connection. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to incorporate the printing data taught by Akiyama within the system of Tamagaki. The suggestion/motivation for doing so would have been that Tamagaki's system would become

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more efficient with the addition of Akiyama's teachings, as print data would be adapted to correspond to the printer's settings, as recognized by Akiyama in column 9, lines 25-51.

Therefore, it would have been obvious to combine the teachings of Akiyama with the system of Tamagaki to obtain the invention as specified in claims 7, 20, and 27.

7. **Claims 12 and 13** are rejected under 35 U.S.C. 103(a) as being unpatentable over Tamagaki (U.S. Patent Number 5,716,148) in view of Sato *et al.* (U.S. Patent Number 6,667,812, cited in the Office action dated 3/8/06).

Regarding **claim 12**, Tamagaki discloses the printer discussed above in claim 8, but fails to expressly disclose if the output initiation instruction includes a predetermined instruction button, multiple operation of gives the output initiation instruction.

Sato discloses a printer for holding two-way communication with a host computer and printing status information about the printer (see Figs. 4, 5, 7, and 10, and column 5, lines 5-50), the printer comprising an output initiation instruction unit configured to instruct the output initiation of the status information (column 5, line 59-column 6, line 11), a status information acquisition unit on the printer's side configured to acquire status information data on the printer (column 5, line 59-column 6, line 11), a status information output unit configured to output through the two-way communication the status information data acquired by the status information acquisition unit on the printer's side (column 5, line 36-column 6, line 39, and column 8, lines 42-65), and causing the host computer to generate printing data for the printer to print the status information (column 4, lines 13-60, column 7, lines 35-65, and column 8, lines 42-65), and a printing unit configured to receive the printing data from the host computer

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through the two-way communication and performing predetermined printing based on the received data (column 1, line 8-column 2, line 30, and column 4, lines 36-60). Further, Sato teaches that the output initiation instruction includes a predetermined instruction button, multiple operation of gives the output initiation instruction (column 6, line 62-column 7, line 30).

Tamagaki & Sato are combinable because they are from the same field of endeavor, being systems that transmit status information of a printer to a host computer via a two-way connection. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to incorporate the instruction button taught by Sato within the system of Tamagaki. The suggestion/motivation for doing so would have been that Tamagaki's system would become more user-friendly with the addition of Sato's teachings, as user's would be able to select the desired operation, as recognized by Sato in column 6, line 62-column 7, line 30. Therefore, it would have been obvious to combine the teachings of Sato with the system of Tamagaki to obtain the invention as specified in claim 12.

Regarding *claim 13*, Tamagaki discloses the printer discussed above in claim 8, but fails to expressly disclose if the status information acquisition unit is configured to acquire fixed status information only when the printer is booted, and the status information acquisition unit is configured to acquire sequentially updated status information when the status is updated.

Sato discloses a printer for holding two-way communication with a host computer and printing status information about the printer (see Figs. 4, 5, 7, and 10, and column 5, lines 5-50), the printer comprising an output initiation instruction unit configured to instruct the output initiation of the status information (column 5, line 59-column 6, line 11), a status information acquisition unit on the printer's side configured to acquire status information data on the printer

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(column 5, line 59-column 6, line 11), a status information output unit configured to output through the two-way communication the status information data acquired by the status information acquisition unit on the printer's side (column 5, line 36-column 6, line 39, and column 8, lines 42-65), and causing the host computer to generate printing data for the printer to print the status information (column 4, lines 13-60, column 7, lines 35-65, and column 8, lines 42-65), and a printing unit configured to receive the printing data from the host computer through the two-way communication and performing predetermined printing based on the received data (column 1, line 8-column 2, line 30, and column 4, lines 36-60). Further, Sato teaches that the status information acquisition unit is configured to acquire fixed status information only when the printer is booted, and the status information acquisition unit is configured to acquire sequentially updated status information when the status is updated (column 6, lines 12-39, and column 13, lines 21-27).

Tamagaki & Sato are combinable because they are from the same field of endeavor, being systems that transmit status information of a printer to a host computer via a two-way connection. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to incorporate the instruction button taught by Sato within the system of Tamagaki. The suggestion/motivation for doing so would have been that Tamagaki's system would become more efficient with the addition of Sato's teachings, as status information would be acquired when the printer is booted, as recognized by Sato in column 6, lines 12-39. Therefore, it would have been obvious to combine the teachings of Sato with the system of Tamagaki obtain the invention as specified in claim 13.

Citation of Pertinent Prior Art

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Song *et al.* (U.S. Patent Number 5,850,583) discloses a system for generating a status message.

Conclusion

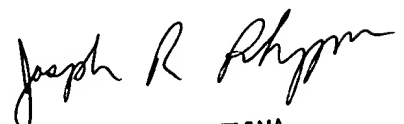
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joe Pokrzywa whose telephone number is (571) 272-7410. The examiner can normally be reached on Monday-Friday, 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward L. Coles can be reached on (571) 272-7402. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Joseph R. Pokrzywa
Primary Examiner
Art Unit 2625

jrp


JOSEPH R. POKRZYWA
PRIMARY EXAMINER